

ABSTRACT OF THE DISCLOSURE

Disclosed is a method for preparing a thin fiber-structured polymer web suitable for a high-speed and large-scale production using electrospinning.

The method uses an electrospinning process to spin a solution containing a polymer in a volatile solvent to obtain a thin fiber-structured polymer web on a collector, in which case the temperature of the polymer solution is in the range of from 40 °C to the boiling point of the solvent. The porous, thin fiber-structured polymer web thus obtained is applicable to the isolation layer or the electrolytic layer for lithium-ion secondary battery, lithium-metal secondary battery or sulfur-based secondary battery, the isolation layer for fuel cells, filter, and so forth.